Lanxess Plastics neighbors find high levels of 1,3 butadiene in front yard

Ruth Breech, Southwest Ohio Program Director Ohio Citizen Action

May 19, 2005

On Friday, May 6 around 10 pm North Bend neighbors saw a haze in the air and smelled a strong odor of burnt plastic. This odor made their eyes water and nose burn. One family had guests over, and they were all overwhelmed by the odor. North Bend is about 1.5 miles from Lanxess Plastics.

During this time, a neighbor took a SUMMA canister air sample, which she gave to the Hamilton County Department of Environmental Services for analysis by DataChem labs on Glendale Milford Road. The lab returned the results to the resident on Tuesday, May 17.

The sample showed 1,3 butadiene at 85 parts per billion (ppb). Hamilton County officials claimed that, "this concentration is out of the norm. This matter is still under investigation." Since North Bend is 1.5 miles from the plant, concentrations could have been higher at the fence line.

According to a resource website <u>www.bucketbrigade.net</u> their link-<u>http://www.creativelement.com/%7Egwen/locform.html</u> the results can be interpreted as follows:

1,3-Butadiene

Reported value of 85 ppb is ABOVE the following Levels of Concern:

EPA Region 6 Screening Level According to Region 6 of the US EPA, no health effects are thought to occur below this level.	0.00575 ppb
Texas Long-Term Screening Level According to the Texas Natural Resource Conservation Commission, no health effects are thought to occur below this level. "Long-term" levels refer to the average exposure level during a year (24 hours for benzene and ethylene dichloride).	9.18 ppb
Louisiana 24-Hour Ambient Air Standard Concentrations above this level are illegal in Louisiana. This level refers to the average level over a 24-hour period.	0.767 ppb
North Carolina Annual Ambient Air Standard Concentrations above this level are illegal in North Carolina. This level refers to the average level over a period of one year.	0.141 ppb

The same analysis is shown in the chart below (in ppb):

Chemical	Reported Level	EPA Region 6 Screening Level	TX ESL - short term	TX ESL - long term	LA 24- hr Std.	NC Annual Std.
1,3- Butadiene	84.9	0.00575	91.8	9.18	0.767	0.141

1,3 butadiene is used to make reinforced plastics. It is a cancer-causing agent and a suspected developmental and reproductive toxin. Exposure to butadiene may damage the heart, lungs, gastrointestinal and nervous systems.

The State of Ohio does not have a legal standard for exposure to toxic chemicals. Nor do we know the long term health effects of the exposure to these chemicals on small children.

Since May 1, 2005 their have been 11 odor complaints. Six complaints include the same chemical/plastic smell that was present when butadiene showed up. Neighbors want to know what they are breathing.

On Saturday, May 14, 2005, a preliminary reading by a CEREX real time air monitor (a machine that reads the chemicals in the air every 60 seconds) also picked up 1,3 butadiene in the air.